UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,670	11/07/2001	Sandra M. Tsontzidis	11227.00	7281

20686 7590 08/26/2003

DORSEY & WHITNEY, LLP
INTELLECTUAL PROPERTY DEPARTMENT
370 SEVENTEENTH STREET
SUITE 4700
DENVER, CO 80202-5647

EXAMINER
LEUNG, PHILIP H

ART UNIT	PAPER NUMBER
3742	8

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/008,670	Applicant(s) TSONTZIDIS ET AL.	
	Examiner Philip H Leung	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 June 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-91* is/are pending in the application.

4a) Of the above claim(s) *26-88* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21 and 89-91* is/are rejected.

7)☒ Claim(s) *22-25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-4, 7-9, 12-18 and 89-91** are rejected under 35 U.S.C. 102(b) as being anticipated by *Stenkamp et al* (US 5,310,977) (reference of the previous Office action)

Stenkamp shows a microwave packaging material comprising: a substrate (structural substrate 14); a microwave interactive material layer (microwave absorptive layer 12) supported upon the substrate , wherein the microwave interactive material layer and the substrate together form a laminate material (see col. 5, line 56 - col. 6, line 50) ; and an indentation pattern (the projections such as ridges 30, 530 and grooves 40, 540 defining circulation channels) formed in the laminate material; wherein the microwave packaging material supports a food product (100); the food product overlies at least a portion of the indentation pattern; and the portion of the indentation pattern directs moisture migration underneath the food product (Stenkamp teaches that "circulation channel" refers to channels or grooves which permit air to circulate around a food item supported over at least a portion of the channel so as to remove fluids [which include both gasses and liquids] from between the food and the substrate supporting the food at col. 2,

line 67 - col. 3, line 29). The claimed intended function and/or result "the indentation pattern creates a gap filled with air between the microwave packaging material and a cooking platform in a microwave oven when the microwave packaging material is placed in the microwave oven; and the air in the gap provides insulation between the microwave packaging material and the cooking platform during operation of the microwave, reducing the effect of the cooking platform as a heat sink and improving the cooking ability of the microwave packaging material" (claims 2 and 90) and "the indentation pattern creates a gap between the microwave packaging material and a cooking platform in a microwave oven when the microwave packaging material is placed in the microwave oven; and when microwave energy generated by the microwave oven propagates through the gap, the incidence of microwave energy impinging upon the food product increases and the heating ability of the microwave oven is improved" (claims 3 and 91) would be inherently met as Stenkamp as it shows all the structure and the improved cooking results with the use of its circulation channels [air gaps] in the susceptor (see col. 2, lines 20-37 and the comparison results at col. 8, line 26 - col 10, line 22). Regarding claims 4 and 7-9, see col. 5, line 56 - col. 6, line 50.

The argument that "the pleated susceptor of Stenkamp provides very little contact between the food product and the susceptor" may be true with Figures 1-4 but Figure 5 of *Stenkamp* clearly addresses this issue by forming "sinusoidal susceptor" instead of "pleated susceptor"to increase the direct contact between susceptor 510 and food item 100 (see col. 7, lines 48-60).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 5, 6, 10, 11, and 19-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Stenkamp et al* (US 5,310,977), in view of *Zeng et al* (US 6,204,492) or *Lai et al* (US 5,698,127).

Stenkamp shows a microwave packaging material comprising: a substrate (structural substrate 14); a microwave interactive material layer (microwave absorptive layer 12) supported upon the substrate , wherein the microwave interactive material layer and the substrate together form a laminate material (see col. 5, line 56 - col. 6, line 50) ; and an indentation pattern (the projections such as ridges 30, 530 and grooves 40, 540 defining circulation channels) formed in the laminate material; wherein the microwave packaging material supports a food product (100); the food product overlies at least a portion of the indentation pattern; and the portion of the indentation pattern directs moisture migration underneath the food product (Stenkamp teaches that "circulation channel" refers to channels or grooves which permit air to circulate around a food item supported over at least a portion of the channel so as to remove fluids [which include both gasses and liquids] from between the food and the substrate supporting the food at col. 2, line 67 - col. 3, line 29). It therefore shows every feature and function as claimed except for the use of a microwave reflective , shielding layer in the microwave interactive layer although it states

that "microwave interactive" refers to materials which absorb and/or reflect a substantial proportion of the microwave energy striking the material (see col. 3, line 24-28 and lines 1-3 of claim 1). Anyway, *Zeng* shows an abuse-tolerant microwave food packaging material includes repeated sets of metallic foil or high optical density evaporated material segments (22) disposed on a substrate (34). Each set of metallic segments (22, 30, 40, 44, 62, 64, 66 etc.) is arranged to define a perimeter (such as 24, 32, 68) having a length equal to a predetermined ratio of the operating, or effective wavelength of a microwave oven. The repeated sets of segments act both as a shield to microwave energy and as focusing elements for microwave energy when used in conjunction with food products yet remaining electrically safe in the absence of the food products (see Figures 1-6 and col. 2, lines 25-63). Similarly, *Lai* shows a microwave food package material having similar claimed features as shown in Figures 2-8 and col. 4, line 15 - col. 6, line 65. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify *Stenkamp* to also include reflective shielding material to form an abuse-tolerant metallic pattern as the microwave interactive layer for better cooking result, in view of the teaching of *Zeng* or *Lai*. The various indentation patterns would have been engineering variations of the patterns in these references following the teaching of *Stenkamp*.

5. **Claims 22-25** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Applicant's arguments with respect to claims 1-22 and 89-91 have been considered but are moot in view of the new ground(s) of rejection. The argument is only persuasive in regard to *Walters et al* (US 5,217,768) but not *Stenkamp*. *Stenkamp* meets the structure and function of the claimed "indentation pattern" as there is no structure in the claims to differentiate the indentation pattern from *Stenkamp* which uses ridge apexes and groove nadirs with circulation channels.

7. Effective May 1, 2003, the address for mail to the USPTO is:

Commissioner for Patents

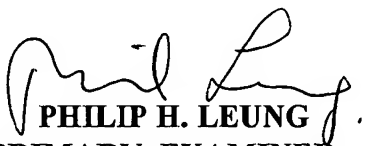
PO Box 1450

Alexandria, VA 22313-1450

8. Any inquiry concerning any communication from the examiner should be directed to Examiner Leung whose telephone number is (703) 308-1710. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg, can be reached on (703) 308-1327. The fax phone number for this Group is (703) 872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.



PHILIP H. LEUNG
PRIMARY EXAMINER
ART UNIT 3742

P.Leung/pl
8-21-03